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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,587	03/27/2006	Hiroaki Sanji	Q93875	9454

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EXAMINER	
BOES, TERENCE	

ART UNIT	PAPER NUMBER
3656	

MAIL DATE	DELIVERY MODE
03/31/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,587	SANJI ET AL.	
	Examiner	Art Unit	
	TERENCE BOES	3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 January 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *3 and 7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *3 and 7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 3 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Igarashi et al. GB 2343157 in view of Minamoto et al. US 5048364.

Igarashi et al. disclose:

- an upper bracket (7) fixed to a vehicle body in a separateable manner;
- a steering column (1) disposed between a pair of tightening plate portions (53) of the upper bracket;
- a steering shaft (45) provided rotatably within the steering column;
- a tilt mechanism comprising a tilt clamp (23, 53, 61) which tightly fastens the steering column between the tightening plate portions of the upper bracket and a tilt pivot (Pivot is about axis which is shown @ 5) which oscillates the steering column;
- an electric assist unit (19) disposed at a lower end of the steering column to transmit an assist force of an electric motor to an output shaft;
- a lower bracket (9) fixed to the vehicle body at an opposite side of the electric assist unit to the steering column to rotatably support a pivot shaft (5) of the tilt pivot,

- wherein a housing of the electric assist unit is brought into engagement with the pivot shaft of the tilt pivot in such a manner as to be allowed to move loosely, so that the steering column is allowed to oscillate about the pivot shaft, (the structure shown in figure 1 is capable of this function, additionally, the examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all claimed structural limitations and therefore anticipates the claim. See MPEP 2114).
- a column rotation restricting portion (see frictional surface of 5 which is capable of restricting rotation) is provided between the lower bracket and the housing.
- wherein the housing of the electric assist unit is brought into engagement with the pivot shaft of the tilt pivot via a connecting member (see back plate portion bolted to 19).

Igarashi et al. discloses a tiltable steering column. Igarashi et al. does not disclose a pair of primary stopper projections which is formed below the pivot shaft of the tile pivot on the lower bracket in such a manner as to oppositely face the connecting member with a determined gap held between the connecting member and themselves; and a secondary stopper projection which is formed above the pivot shaft of the tilt pivot

in such a manner as to oppositely face the connection member with a determined gap held between the secondary stopper projection and itself.

Minamoto et al. teaches a pair of primary stopper projections (46 and lower instance of 50) which is formed below the pivot shaft (6) of the tilt pivot on a lower bracket in such a manner as to oppositely face the connecting member with a determined gap held between the connecting member and themselves; and a secondary stopper projection (upper instance of 50) which is formed above the pivot shaft of the tilt pivot in such a manner as to oppositely face the connection member with a determined gap held between the secondary stopper projection and itself.

Because both Igarashi et al. and Minamoto et al. teach tilt steering columns, it would have been obvious to one having ordinary skill in the art at the time of the invention to provide a pair of primary stopper projections which is formed below the pivot shaft of the tile pivot on the lower bracket in such a manner as to oppositely face the connecting member with a determined gap held between the connecting member and themselves; and a secondary stopper projection which is formed above the pivot shaft of the tilt pivot in such a manner as to oppositely face the connection member with a determined gap held between the secondary stopper projection and itself to achieve the predictable result of limiting the travel of a steering column.

Response to Arguments

2. Applicant's arguments filed 01/21/2009 have been fully considered but they are not persuasive.

Applicant argues "Minamoto also fails to disclose the claimed primary and secondary stopper projections"..." The stoppers 46 and 47 just restrict the tilt rotational limitation of the member 5b and the stoppers 50, 50 are just fail-safe members, which functions only if the stoppers 46 and 47 are failed. Therefore, the stoppers 46, 47 and 50 do not abut with the member 5b when the upper bracket is separated from the vehicle body. Therefore, since Igarashi and Minamoto fail to the claimed primary and secondary stopper projections, the invention as recited in claim 3 is patentable over these references."

In response, here applicant appears to be arguing that the prior art not disclose the claimed **structure** of primary and secondary stopper projections **because** the prior art does not explicitly disclose a particular **function**. However this reasoning fails. The examiner notes while features of an apparatus may be recited either structurally or functionally, claims directed to >an< apparatus must be distinguished from the prior art in terms of structure rather than function. The reference discloses all claimed structural limitations (that is primary and secondary stopper projections, see 46 and 50 of Minamoto et al.) and therefore anticipates the claim. See MPEP 2114. In addition, the recitation "wherein when the upper bracket is separated from the vehicle body..." does not structurally limit the claim, as the term "when" renders any following limitations both functional and optional.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERENCE BOES whose telephone number is (571)272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terence Boes/
Examiner, Art Unit 3656

/Richard WL Ridley/
Supervisory Patent Examiner, Art Unit 3656